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09/855,045	05/15/2001	Maria Raidel	29226-1PCT/US/ KC13,065.1	2567

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EXAMINER

ANDERSON, CATHARINE L

ART UNIT	PAPER NUMBER
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3761

DATE MAILED: 05/21/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

GL

Office Action Summary

Application No.

09/855,045

Applicant(s)

RAIDEL ET AL.

Examiner

C. Lynne Anderson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-55 and 57-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 50-53, 60 and 61 is/are allowed.
- 6) ☒ Claim(s) 36-49, 54, 55, 57-59, 62, 65 and 66 is/are rejected.
- 7) ☒ Claim(s) 63, 64 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 36-40 and 43 are rejected under 35 U.S.C. 102(e) as being anticipated by Sauer (5,527,300).

Sauer discloses an absorbent article 10, as shown in figure 2, having a length and width, and a front area 12 and rear area 14. The absorbent article 10 comprises a liquid permeable layer 28, a liquid impermeable layer 30, an undulating layer 46, a liquid distribution layer 70, and a liquid storage layer 48, as shown in figure 4. The liquid distribution layer 70 comprises a web of sheet material, as disclosed in column 14, lines 47-55, the web of sheet material having openings, as disclosed in column 15, lines 14-16. The instant claim discloses a product, an absorbent article, rather than a process of making an absorbent article. The disclosure of the openings as being formed after fabrication of the web is therefore considered a product by process limitation, and given minimal patentable weight. The web disclosed by Sauer fulfills all of the structural

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limitations disclosed in the instant claim. The undulating layer 46 comprises elongate undulations defining elongate open flow channels between the undulating layer 46 and the underlying and overlying elements, as shown in figure 3.

With respect to claim 37, the instant claim discloses a product, an absorbent article, rather than a process of making an absorbent article. The disclosure of the openings as being formed after fabrication of the web is therefore considered a product by process limitation, and given minimal patentable weight. The web disclosed by Sauer fulfills all of the structural limitations disclosed in the instant claim.

With respect to claim 38, the undulating layer 46 facilitates transfer of fluid longitudinally, as shown in figure 5.

With respect to claim 39, the channels extend along the length of the absorbent article 10, as shown in figure 5.

With respect to claim 40, the undulating layer 46 is connected at spaced locations to the liquid distribution layer 70, as disclosed in column 21, lines 16-20.

With respect to claim 43, the liquid storage layer 48 extends into the front area 12 and rear area 14, as shown in figure 2. The front and rear areas 12 and 14 may be defined as larger than the central area, and therefore comprise a greater volume of the liquid storage layer 48. The liquid storage layer 48 therefore has a higher retention capacity in the front area 12 or rear area 14 than in the central area.

Claims 49, 54, 55, 57-59, and 66 are rejected under 35 U.S.C. 102(b) as being anticipated by Gilman et al. (5,437,653).

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Gilman discloses an absorbent article 10, as shown in figure 1, having a length and width, and a front area, central area, and rear area. The absorbent article 10 comprises a liquid permeable layer 12, a liquid impermeable layer 16, a liquid distribution layer 20, and a liquid storage layer 22. The liquid distribution layer 20 comprises passages 18, as shown in figure 2, with zones 28 of relatively greater fiber density of the liquid distribution layer 20 at the points where the liquid distribution layer 20 was compressed to form the passages 26.

With respect to claim 54, the liquid storage layer 22 extends into the front area and the rear area, as shown in figure 1. The front and rear areas may be defined as larger than the central area, and therefore comprise a greater volume of the liquid storage layer 22. The liquid storage layer 22 therefore has a higher retention capacity in the front area or rear area than in the central area.

With respect to claim 55, the liquid distribution layer 20 and liquid storage layer 22 are in contact with each other via compression, as shown in figures 1 and 2.

With respect to claim 57, the passages 26 have tapering ends, as shown in figure 2, the tapering ends having feet in contact with the outer surface of the liquid storage layer 22, as shown in figure 1.

With respect to claim 58, the central area may be defined as to contain no passages 26, and therefore is devoid of feet, as show in figure 1.

With respect to claim 59, the absorbent article 20 is a sanitary pad, as shown in figure 1.

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With respect to claim 66, the liquid distribution layer 20 comprises passages 26 that taper inwardly toward the liquid storage layer 22, as shown in figure 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer (5,527,300) as applied to claim 36 above, and further in view of Gilman et al. (5,437,653).

Sauer discloses all aspects of the claimed invention with the exception of a pigment additive. Gilman discloses coloring an underlying layer of an absorbent article with a pigment additive, as described in column 4, lines 66-67. The addition of a pigment masks stains, as disclosed in column 3, line 65. It would therefore be obvious to one of ordinary skill in the art at the time of invention to color the undulating layer of Sauer with a pigment additive, as taught by Gilman, to mask stains.

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer (5,527,300) as applied to claim 36 above, and further in view of Cohen et al. (5,569,226).

Sauer discloses all aspects of the claimed invention with the exception of the web being an uncreped through-air-dried material. Cohen discloses an absorbent article comprising a liquid distribution layer 22. The liquid distribution layer 22

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comprises an uncreped through-air-dried material, as disclosed in column 6, lines 43-45, to provide sufficient fluid passage. It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the web of Sauer from an uncreped through-air-dried material, as taught by Cohen, to provide sufficient fluid passage.

Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer (5,527,300) as applied to claim 36 above.

Sauer discloses all aspects of the claimed invention but remains silent as to the way in which the liquid distribution layer and the liquid storage layer are joined. The use of compression to join two layers is well-known in the art as a secure and economical method of joining layers. It would therefore be obvious to one of ordinary skill in the art at the time of invention to join the liquid distribution layer and the liquid storage layer of Sauer by means of compression, in order to have a secure and economical bond.

With respect to claim 45, joining the liquid distribution layer and the liquid storage layer by means of compression would result in point-like areas of compression separated by the openings in the liquid distribution layer.

Claims 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer (5,527,300) as applied to claim 36 above, and further in view of Chappell et al. (H1511).

Sauer discloses all aspects of the claimed invention but remains silent as to the way in which the liquid distribution layer and the liquid storage layer are joined. Chappell discloses joining layers of an absorbent article by means of a latex adhesive, as described in column 13, lines 23-24, which is hydrophilic. Chappell teaches applying

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the adhesive in a point-like manner, as described in column 13, line 31, to avoid blocking the openings in the layers with the adhesive, as disclosed in column 13, lines 2-4. It would therefore be obvious to one of ordinary skill in the art at the time of invention to join the liquid distribution layer and liquid storage layer of Sauer using the method taught by Chappell in order to avoid blocking the openings in the layers with the adhesive.

Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer (5,527,300) as applied to claim 36 above, and further in view of Ahr et al. (4,323,069).

Sauer discloses all aspects of the claimed invention with the exception of the liquid distribution layer comprising funnel-shaped openings that taper inwardly. Ahr discloses a liquid distribution layer 40 comprising a plurality of funnel-shaped openings that taper inwardly, as shown in figure 5. The funnel-shaped openings of the liquid distribution layer 40 reduce the amount of liquid that may pass back through the layer 40 without reducing the speed with which liquids pass through the layer, as disclosed in column 12, lines 58-62. It would therefore be obvious to one of ordinary skill in the art at the time of invention to taper the openings in the liquid distribution layer of Sauer, as taught by Ahr, in order to reduce the amount of liquid able to pass back through the layer.

Claims 62 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilman (5,803,920) in view of Ahr et al. (4,323,069).

Gilman discloses all aspects of the claimed invention with the exception of funnel shaped openings. Gilman discloses an absorbent article 10, as shown in figure 1,

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having a front area, a central area, and a rear area. The absorbent article 10 comprises a liquid permeable layer 12 and a liquid impermeable layer 14, as shown in figure 2.

Liquid distribution layers, shown in figure 6 as the top layers 90, and a liquid storage layer, shown in figure 6 as the bottom layer 90, are disposed between the liquid permeable layer 12 and liquid impermeable layer 14. The liquid distribution layers 90 have openings 92 defining discrete passages which promote movement of liquid away from the liquid permeable layer 12. The openings 92 are spaced laterally from each other, as shown in figure 6.

Ahr discloses a liquid distribution layer 40 comprising a plurality of funnel-shaped openings that taper inwardly, as shown in figure 5. The funnel-shaped openings of the liquid distribution layer 40 reduce the amount of liquid that may pass back through the layer 40 without reducing the speed with which liquids pass through the layer, as disclosed in column 12, lines 58-62. It would therefore be obvious to one of ordinary skill in the art at the time of invention to taper the openings in the liquid distribution layer of Gilman, as taught by Ahr, in order to reduce the amount of liquid able to pass back through the layer.

With respect to claim 65, the portion of the funnel shaped openings of Ahr closest to the liquid permeable layer are larger than the portions of the funnel shaped openings most remote from the liquid permeable layer, as shown in figure 5.

Allowable Subject Matter

Claims 50-53 and 60-61 are allowed.

Claims 63 and 64 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (703) 306-5716. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (703) 308-1957. The fax phone numbers for

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the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 306-4520 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

CWA

cla

May 19, 2003


WEILUN LO
SUPERVISORY PATENT EXAMINER
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